METHOD AND APPARATUS EMPLOYING PAM-5 CODING WITH CLOCK EMBEDDED IN DATA STREAM AND HAVING A TRANSITION WHEN DATA BITS REMAIN UNCHANGED

ABSTRACT OF THE DISCLOSURE

To significantly reduce mobile station static power consumption, and to make it possible to use a high speed asynchronous link in the mobile station, the invention uses one of the amplitude levels of, preferably, a PAM-5 (Pulse Amplitude Modulation with five amplitude levels) modulation technique as a strobe signal to generate a change in the transmitted signal. The change in the transmitted signal makes it possible for a PAM-5 receiving circuit to sample and decode two consecutive occurrences of the same data bits. The use of this invention avoids the requirement to include an oscillator in the PAM-5 receiver, or to dedicate a signal line to transmit a clock signal from the transmitter to the receiver.